## Claims

1. (Currently amended) An aqueous-based electroplating composition comprising:
about 35 to about 50 ~~60~~ g/L copper;
~~about~~ 65 to about 100~~150~~ g/L sulfuric acid; and
a glycol-based suppressor.

2. (Original) The composition of claim 1 wherein the glycol-based suppressor is present at a concentration of from about 2 to about 30 ml/L.

3. (Original) The composition of claim 1 further comprising a copper-deposition accelerator present at a concentration of from about 2 to about 30 ml/L.

4. (Original) The composition of claim 1 further comprising from about 10 to about 100 ppm halide ion.

5. (Previously presented) The composition of claim 1 further comprising from about 30 to about 60 ppm HCl.

6. (Currently Amended) An electroplating composition comprising:
about 35 to about 50~~60~~ g/L copper;
~~about~~ 65 to about 150 g/L sulfuric acid; and
about 2 to about 30 ml/L of a copper-deposition suppressor;
wherein the balance of the composition is water.

7. (Original) The composition of claim 6 further comprising a copper-deposition accelerator at a concentration of from about 2 to about 30 ml/L.

Claims 8 - 13 (Canceled)

14. (Original) The composition of claim 6 further comprising from about 10 to about 100 ppm HCl.

15. (Currently amended) An aqueous electroplating composition comprising:
about 35 to about 50~~60~~ g/L copper;
~~about~~ 65 to about 100~~150~~ g/L sulfuric acid;
about 2 to about 30 ml/L copper-deposition accelerator;
about 2 to about 30 ml/L copper-deposition suppressor; and
about 40 to about 60 ppm hydrogen chloride.

Claims 16 - 18 (Canceled)

19. (Currently amended) An electroplating composition comprising:
about 45 to about 50~~55~~ g/L copper;
about 75 to about 100~~120~~ g/L sulfuric acid;
a copper-deposition suppressor; and
a copper-deposition accelerator.

20. (Previously presented) The composition of claim 19 wherein the copper-deposition suppressor is at a concentration of from about 2 to about 10 ml/L.

21. (Previously presented) The composition of claim 19 wherein the copper-deposition accelerator is present at a concentration of from about 2 to about 8 ml/L.

22. (Original) The composition of claim 19 further comprising from about 10 to about 100 ppm halide ion.

Claims 23 - 25 (Canceled)

26. (Currently amended) An electroplating composition comprising:

an aqueous mixture of copper and sulfuric acid wherein the ratio in g/L of solution of copper to acid is equal to about 0.4 to about 0.7~~0.8~~;

a copper-deposition suppressor; and

a copper-deposition accelerator.

Claims 27 – 54 (Canceled)

55. (Currently amended) A method for plating a workpiece comprising:

providing a workpiece having a plurality of device features including a seed layer wherein the plurality of device features is to be metallized;

electrolytically depositing copper within the plurality of device features utilizing an electroplating composition comprising about 35 to about 50~~60~~ g/L copper, ~~about~~ 65 to about 100~~150~~ g/L sulfuric acid, and a glycol-based suppressor.

56. (Original) The method of claim 55 further comprising a seed enhancement procedure.

57. (Previously presented) The method of claim 55 further comprising rinsing and drying the workpiece, wherein the rinsing and/or the drying occurs in a chamber in which the deposition of copper is performed.

58. (Original) The method of claim 55 further comprising selective etching of copper deposited on the workpiece.

59. (Original) The method of claim 55 further comprising cleaning the backside of the workpiece after copper is deposited on the workpiece.

60. (Original) The method of claim 55 further comprising annealing the workpiece at temperatures below about 100°C.

61. (Previously presented) The method of claim 55 further comprising precleaning the workpiece prior to depositing copper wherein the precleaning of the workpiece is performed in a plating tool in which plating tool the deposition is also performed.

62. (Currently amended) The method of claim 55 wherein the electroplating composition comprises from about 35 to about 50~~60~~ g/L copper, from ~~about~~ 65 to about 100~~150~~ g/L sulfuric acid, and from about 2 to about 30 ml/L the glycol-based suppressor.

Claims 63 - 65 (Canceled)

66. (Currently amended) A process for applying a metallization interconnect structure, comprising:

providing a workpiece on which a metal seed layer has been formed using a first deposition process;

enhancing the seed layer by electrochemically depositing additional metal on the seed layer within a principal fluid chamber of a reactor to provide an enhanced seed layer using a deposition process comprising supplying electroplating power to a plurality of concentric anodes disposed at different positions within the principal fluid flow chamber relative to the workpiece; and

electrolytically depositing a metal on the enhanced seed layer utilizing an electroplating composition comprising about 35 to about 50~~60~~ g/L copper, about 65 to about 100~~150~~ g/L sulfuric acid, and a glycol-based suppressor.

67. (Canceled)

68. (Currently amended) A process for applying a metallization interconnect structure, comprising:

providing a workpiece on which a metal seed layer has been formed;

enhancing the seed layer by electrochemically depositing additional metal on the seed layer within a principal fluid chamber of a reactor to provide an enhanced seed layer using a

deposition process comprising supplying electroplating power to a plurality of electrodes within the principal fluid flow chamber,

independently controlling the supply of electrical power to the at least two electrodes during enhancing of the seed layer; and

electrolytically depositing copper on the enhanced seed layer under conditions in which the deposition rate of the electrolytic deposition process is substantially greater than the deposition rate of the process used to enhance the metal seed utilizing an electroplating composition comprising a mixture of copper and sulfuric acid wherein the ratio in g/L of copper to acid is equal to about 0.4 to about 0.7~~0.8~~, a copper-deposition suppressor, and a copper-deposition accelerator.

69. (Canceled)